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**THE  
NATIONAL  
BOARD**  
OF BOILER AND  
PRESSURE VESSEL  
INSPECTORS

## **SUBCOMMITTEE ON PRESSURE RELIEF DEVICES**

### *AGENDA*

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*Meeting of July 18, 2012  
Columbus, Ohio*

The National Board of Boiler & Pressure Vessel Inspectors  
1055 Crupper Avenue  
Columbus, Ohio 43229-1183  
Phone: (614)888-8320  
FAX: (614)847-1828

1. **Call to Order – 8:00 a.m.**
2. **Announcements**
3. **Adoption of the Agenda**
4. **Approval of meeting Minutes of January 19, 2012**
5. **Review of the Roster (Attachment 1)**
6. **Interpretations (Attachment 2)**

**IN12-0301 A Part 2, 2.5.8, SC on PRD-** Q: The table of suggested inspection and test frequencies in 2.5.8 f) does not include a column for "test frequency". Is the suggested test frequency the same as the suggested inspection frequency? Proposed reply: Yes (Attachment 2, p.1)

**IN12-0301 B Part 2, 2.5.8, SC on PRD-** Q: When test records and/or inspection histories are available, can the guidelines in 2.5.8 (g) be used to establish inspection and test frequencies, even if a suggested frequency is given in the table in 2.5.8 f)? Proposed reply: Yes (Attachment 2, p. 2)

**IN12-0301 C Part 2, 2.5.8, SC on PRD-** Q: For relief devices on a pressure vessel in clean dry gas service, if testing records are available, and a testing frequency is established in accordance with 2.5.8 g) may the interval between relief device tests exceed 5 years? Proposed reply: Yes (Attachment 2, p.3)

**IN12-0301 D Part 2, 2.5.8, SC on PRD-**Q: For relief devices on a pressure vessel in clean dry gas service, if testing records and inspection histories are available, and a testing frequency is established in accordance with 2.5.8 g), may the interval between inspections be different than the interval between tests. For example, in clean dry gas service, would it be acceptable if the relief devices were inspected every 2 years, but tested every 6 years? Proposed reply: Yes (Attachment 2, p. 4)

**IN12-0301 E Part 2, 2.5.8, SC PRD** Q: Once an acceptable relief device test interval has been established per 2.5.8(g), is it acceptable to replace the relief devices with new devices, of the same make and design, at the established test frequency, in lieu of testing the relief devices? For example, in clean dry gas service, would it be acceptable if the relief devices were inspected every 2 years, and replaced every 6 years in lieu of functional testing, with a random sample of replaced devices being bench tested to confirm that the 6-year interval is still acceptable? Proposed Reply: Yes (Attachment 2, p. 5)

## 7. **Action Items (Attachment 3)**

**NB11-0401 Part 4, SC on PRD** -The development of a possible fourth part of the NBIC to cover pressure relief devices. (Attachment 3, pp.5- 186 )

### January 2011

Mr. Hart presented a progress report. Three SC-PRD task groups worked on identifying pressure relief valve paragraphs that are in NBIC Parts 1, 2, and 3 to be moved to a proposed NBIC Part 4. From this work a final draft is now being completed. A Part 4 draft will be distributed by letter ballot to the SC-PRD following this meeting. Once that is in agreement the part 4 will be forwarded to the other Subcommittees for their review. Once that is in agreement it will then be presented to the main committee.

### July 2011

Based upon previous task group work, a draft of a proposed NBIC Part 4 has been prepared and included in the meeting agenda. The draft included open questions and comments for review by the subcommittee. A detailed review of the draft was done during the meeting. Comments received from the subcommittee members will be incorporated into an updated draft that will be distributed by letter ballot to the subcommittee. Drafts of Parts 1, 2, and 3 will also be prepared showing items to be deleted from those parts. A summary list showing paragraphs moved will also be prepared for information. It is anticipated that once the subcommittee ballot is completed, that an information ballot would be distributed to the other subcommittees to obtain additional feedback and illustrate how the NBIC would be reorganized. It was requested that the review also include a check to see if there was a reference to PTC-25 for terminology.

### January 2012

The draft of a proposed NBIC Part 4 was extensively reviewed by the subcommittee. The chair noted that most of this work on this item needed to be completed by July of this year in order to allow time for completion of all public review activities before the expected 2013 publication date.

The following schedule was outlined to move this item forward.

1. Letter ballot of the Subcommittee of the draft about one month after the meeting. The draft will include changes noted at the meeting plus word searches for where the term “pressure relief device or valve” is needed and “mounting” changed to “installation”. All page numbering may not be done in the draft at this time.
2. Information ballot to be sent to other subcommittees to show the effect on Parts 1 through 3 with pressure relief topics moved to Part 4.
3. Resolution of comments from steps 1 and 2 before July meeting
4. Presentation of final document for NBIC Committee approval by July 2012

There was a question from Mr. Donalson as to whether previous interpretations would be included. One proposed solution was to include a reference to the web page location where interpretations are currently listed.

### July 2012

Mr. Ball is expected to report. The Comments from the other 3 subcommittees are attached for the SC on PRD to review.

**NB12-0901 Part 3, SC PRD** - Prepare a guide for repair of tank vents. (No Attachment)

### January 2012

Mr. Simmons reported that some research had been started on this topic to see what information would be suitable for a guide on the repair of tank vents, and what may be available from other sources. Messrs. Dobbins, Donalson and Beise were added to the task group which also includes Mr. DeMichael (chair) and Mr. Simmons.

### July 2012

Mr. DeMichael is expected to report.

**NB12-1701 Part 2, SC PRD** Suggestion to make it mandatory for manufacturers to make it public to all assemblers and VR stamp holders if there is a problem with their valves. (Attachment 3, pp. 187-188)

July 2012

Mr. Ball is expected to report.

## **9. Future Meetings**

January 14-18, 2013, Mobile, Alabama

July 15-18 2013, Columbus, Ohio

## **10. Adjournment**

Respectfully Submitted,

Joseph F. Ball

Secretary

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# SC on Pressure Relief Devices

Member	Title	ExpirDate	Interest Category
Anthony, Benjamin		2/28/2014	Jurisdictional Authorities
Ball, Joseph F.	Secretary		
Brodeur, Marianne		8/31/2012	NB Certificate Holders
Cammeresi, Sid		8/31/2012	NB Certificate Holders
Cox, J. Alton	Vice Chair	1/31/2015	General Interest
DeMichael, Denis B.		8/31/2012	Users
Dobbins, Robert		1/31/2013	Auth Inpection Agencies
Donalson, R. W.		8/31/2012	NB Certificate Holders
Hart, Frank	Chair	8/31/2012	NB Certificate Holders
McCaffrey, Raymond		7/31/2014	General Interest
Patel, Thakor		1/31/2013	Manufacturer
Simmons, Kevin L.		8/31/2013	Manufacturer

<b>Total Members:</b>	<b>11</b>
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**PROPOSED INTERPRETATION**

<b>Inquiry No.</b>	IN12-0301 A				
<b>Source</b>	Adam Renaldo				
<b>Subject</b>	Part 2, 2.5.8				
<b>Edition</b>	2011 Edition				
<b>Question</b>	The table of suggested inspection and test frequencies in 2.5.8 (f) does not include a column for "test frequency". Is the suggested test frequency the same as the suggested inspection frequency?				
<b>Reply</b>	Yes				
<b>Committee's Question</b>					
<b>Committee's Reply</b>					
<b>Rationale</b>					
<b>SC Vote</b>	Unanimous	No. Affirmative	No. Negative	No. Abstain	No. Not Voting
<b>NBIC Vote</b>	Unanimous	No. Affirmative	No. Negative	No. Abstain	No. Not Voting
<b>Negative Vote Comments</b>					

**PROPOSED INTERPRETATION**

<b>Inquiry No.</b>	IN12-0301 B				
<b>Source</b>	Adam Renaldo				
<b>Subject</b>	Part 2, 2.5.8				
<b>Edition</b>	2011 Edition				
<b>Question</b>	When test records and/or inspection histories are available, can the guidelines in 2.5.8 (g) be used to establish inspection and test frequencies, even if a suggested frequency is given in the table in 2.5.8 (f)?				
<b>Reply</b>	Yes				
<b>Committee's Question</b>					
<b>Committee's Reply</b>					
<b>Rationale</b>					
<b>SC Vote</b>	Unanimous	No. Affirmative	No. Negative	No. Abstain	No. Not Voting
<b>NBIC Vote</b>	Unanimous	No. Affirmative	No. Negative	No. Abstain	No. Not Voting
<b>Negative Vote Comments</b>					

## PROPOSED INTERPRETATION

<b>Inquiry No.</b>	IN12-0301 C				
<b>Source</b>	Adam Renaldo				
<b>Subject</b>	Part 2, 2.5.8 g)				
<b>Edition</b>	2011 Edition				
<b>Question</b>	For relief devices on a pressure vessel in clean dry gas service, if testing records are available, and a testing frequency is established in accordance with 2.5.8 g) may the interval between relief device tests exceed 5 years?				
<b>Reply</b>	Yes				
<b>Committee's Question</b>					
<b>Committee's Reply</b>					
<b>Rationale</b>					
<b>SC Vote</b>	Unanimous	No. Affirmative	No. Negative	No. Abstain	No. Not Voting
<b>NBIC Vote</b>	Unanimous	No. Affirmative	No. Negative	No. Abstain	No. Not Voting
<b>Negative Vote Comments</b>					

## PROPOSED INTERPRETATION

<b>Inquiry No.</b>	IN12-0301 D				
<b>Source</b>	Adam Renaldo				
<b>Subject</b>	Part 2, 2.5.8				
<b>Edition</b>	2011 Edition				
<b>Question</b>	For relief devices on a pressure vessel in clean dry gas service, if testing records and inspection histories are available, and a testing frequency is established in accordance with 2.5.8 g), may the interval between inspections be different than the interval between tests. For example, in clean dry gas service, would it be acceptable if the relief devices were inspected every 2 years, but tested every 6 years?				
<b>Reply</b>	Yes				
<b>Committee's Question</b>					
<b>Committee's Reply</b>					
<b>Rationale</b>					
<b>SC Vote</b>	Unanimous	No. Affirmative	No. Negative	No. Abstain	No. Not Voting
<b>NBIC Vote</b>	Unanimous	No. Affirmative	No. Negative	No. Abstain	No. Not Voting
<b>Negative Vote Comments</b>					

## PROPOSED INTERPRETATION

<b>Inquiry No.</b>	IN12-0301 E				
<b>Source</b>	Adam Renaldo				
<b>Subject</b>	Part 2, 2.5.8				
<b>Edition</b>	2011 Edition				
<b>Question</b>	Proposed question: Once an acceptable relief device test interval has been established per 2.5.8 g) is it acceptable to replace the relief devices with new devices of the same make and design, at the established test frequency, in lieu of testing the relief devices? For example, in clean dry gas service, would it be acceptable if the relief devices were inspected every 2 years, and replaced every 6 years in lieu of functional testing, with a random sample of replaced devices being bench tested to confirm that the 6 year interval is still acceptable?				
<b>Reply</b>	Yes				
<b>Committee's Question</b>					
<b>Committee's Reply</b>					
<b>Rationale</b>					
<b>SC Vote</b>	Unanimous	No. Affirmative	No. Negative	No. Abstain	No. Not Voting
<b>NBIC Vote</b>	Unanimous	No. Affirmative	No. Negative	No. Abstain	No. Not Voting
<b>Negative Vote Comments</b>					

Technical Inquiry for NBIC, 2011 Edition, Part 2, Section 2.5.8  
Purpose: Requests for Interpretation

Inquirer: Adam M. Renaldo, PE  
Address: Praxair, Inc., 175 East Park Dr, Building 1, Rm 110, Tonawanda, NY 14150  
Telephone: 716-879-2928  
Fax: 866-710-0972  
Email: Adam\_Renaldo@Praxair.com

Subject: NBIC, 2011 Edition, Part 2, Section 2.5.8

Question 1: The table of suggested inspection and test frequencies in 2.5.8 (f) does not include a column for "Test Frequency." Is the suggested test frequency the same as the suggested inspection frequency?

Proposed Reply: Yes

Question 2: When test records and/or inspection histories are available, can the guidelines in 2.5.8 (g) be used to establish inspection and test frequencies, even if a suggested frequency is given in the table in 2.5.8 (f)?

Proposed Reply: Yes

Question 3: For relief devices on a pressure vessel in clean dry gas service, if testing records are available, and a testing frequency is established in accordance with 2.5.8 (g), may the interval between relief device tests exceed 5 years?

Proposed Reply: Yes

Question 4: For relief devices on a pressure vessel in clean dry gas service, if testing records and inspection histories are available, and a testing frequency is established in accordance with 2.5.8 (g), may the interval between inspections be different than the interval between tests. For example, in clean dry gas service, would it be acceptable if the relief devices were inspected every 2 years, but tested every 6 years?

Proposed Reply: Yes

Question 5: Once an acceptable relief device test interval has been established per 2.5.8 (g), is it acceptable to replace the relief devices with new devices, of the same make and design, at the established test frequency, in lieu of testing the relief devices? For example, in clean dry gas service, would it be acceptable if the relief devices were inspected every 2 years, and replaced every 6 years in lieu of functional testing, with a random sample of replaced devices being bench tested to confirm that the 6-year interval is still acceptable?

Proposed Reply: Yes

Background:

Excerpt from NBIC, 2011 Edition, Part 2, Section 2.5.8

f) Pressure Vessels and Piping

Frequency of test and inspection of pressure relief devices for pressure vessel and piping service is greatly dependent on the nature of the contents and operation of the system and only general recommendations can be given. Inspection frequency should be based on previous inspection history. If valves are found to be defective or damaged by system contents during inspection, intervals should be shortened until acceptable inspection results are obtained. Where test records and/or inspection history are not available, the following inspection and test frequencies are suggested:

<b>Service</b>	<b>Inspection Frequency</b>
Steam	Annual
Air and Clean Dry Gases	Every three years
Pressure relief valves in combination with rupture disks	Every five years
Propane, Refrigerant	Every five years
All Others	Per inspection history

g) Establishment of Inspection and Test Intervals

Where a recommended test frequency is not listed, the valve user and Inspector must determine and agree on a suitable interval for inspection and test. Some items to be considered in making this determination are:

- 1) Jurisdictional requirements;
- 2) Records of test data and inspections from similar processes and similar devices in operation at that facility;
- 3) Recommendations from the device manufacturer...